

# May Climate Summary for Southwest Lower Michigan

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## Overview

The month of May featured a classic spring pattern of weather extremes across the region. The month began quite mild and featured measurable rain, but a chilly period soon followed for much of the first half of the month. The second half of the month offered a warmer stretch of weather along with some extreme precipitation events for some areas. The last seven days were very warm and provided for the first 90 degree readings for the 2010 calendar year in some locations. Overall, May was warmer than normal and slightly wetter than normal.

Location		Temperature (degrees F)	Precipitation (inches)	Snowfall (inches)
Grand Rapids	<i>Reported</i>	61.6	3.80	0
	<i>Normal</i>	58.1	3.35	Trace
	<i>Departure</i>	+3.5	+0.45	0
Lansing	<i>Reported</i>	60.7	4.18	0
	<i>Normal</i>	57.1	2.71	Trace
	<i>Departure</i>	+3.6	+1.47	0
Muskegon	<i>Reported</i>	59.8	3.02	0
	<i>Normal</i>	56.1	2.95	Trace
	<i>Departure</i>	+3.7	+0.07	0

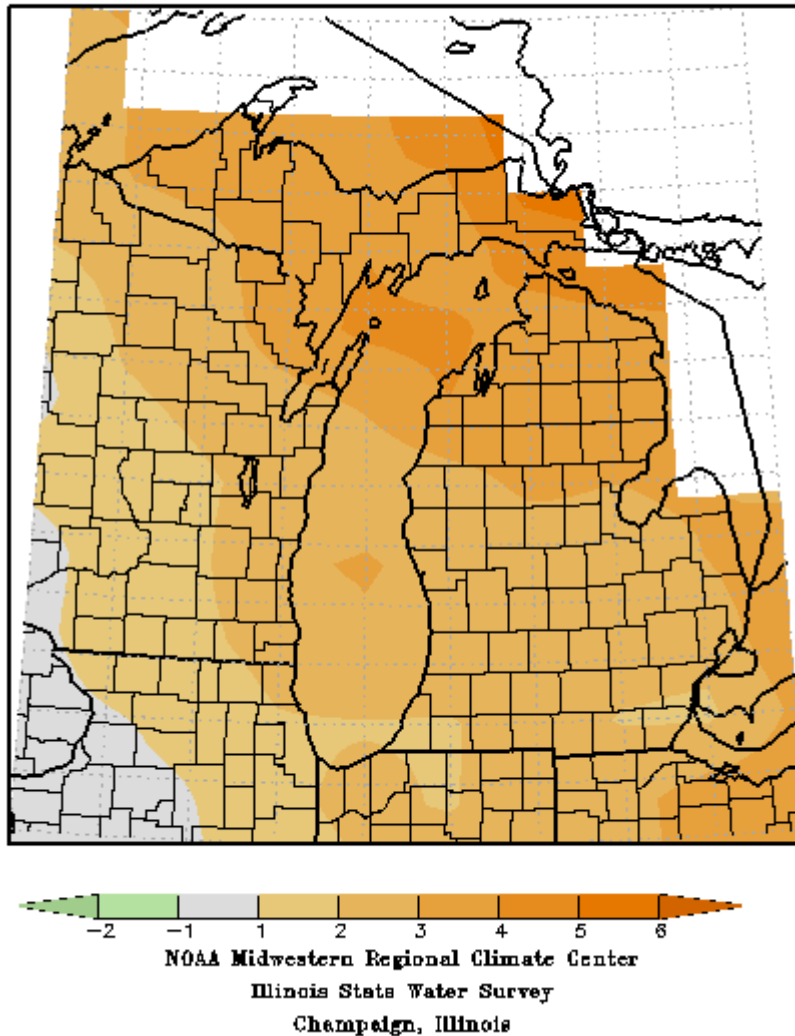
**Table 1.** Reported temperature, precipitation, and snowfall for May 2010 in Grand Rapids, Lansing, and Muskegon.

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### Temperature Summary for May:

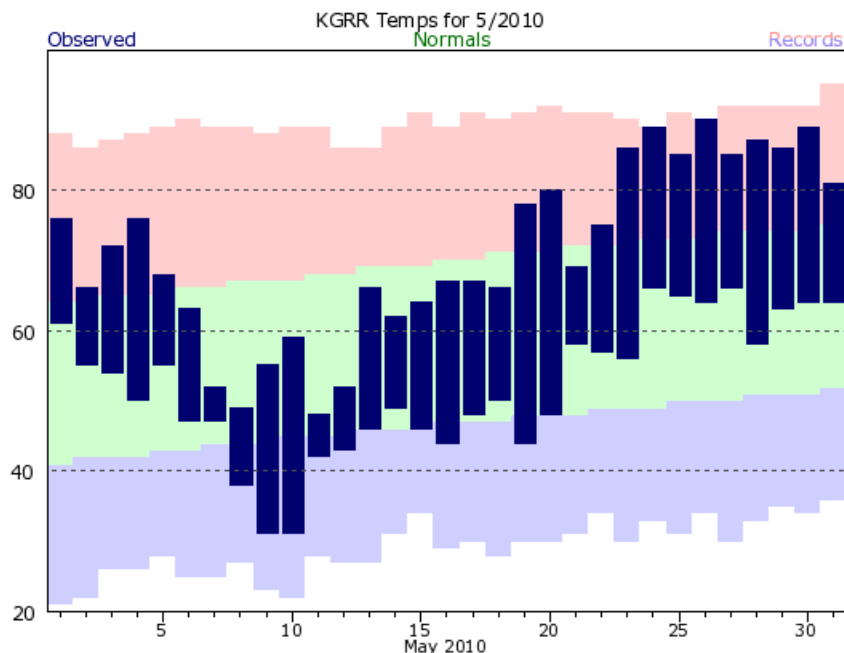
After a mild start to the month with daily average temperatures well into the 60s, a prolonged period of chilly weather dominated the region from the 5<sup>th</sup> to the 18<sup>th</sup>. During this stretch, highs failed to reach 70 degrees for many locations across Southwest Lower Michigan, particularly north of the Interstate 94 corridor. Downright cold temperatures were common especially on the 8<sup>th</sup> and the 11<sup>th</sup>, when Grand Rapids and Lansing failed to get out of the 40s. Highs returned to near 80 degrees on the 20<sup>th</sup>, and very warm weather invaded all of Lower Michigan for the last week of the month. Record highs were either set or tied in Grand Rapids and Muskegon on the 24<sup>th</sup> and 26<sup>th</sup>. Grand Rapids recorded its first 90 degree day of 2010 on the 26<sup>th</sup>, a new daily record.

Average Temperature Departure from Mean in Degrees F  
May 1, 2010 to May 31, 2010

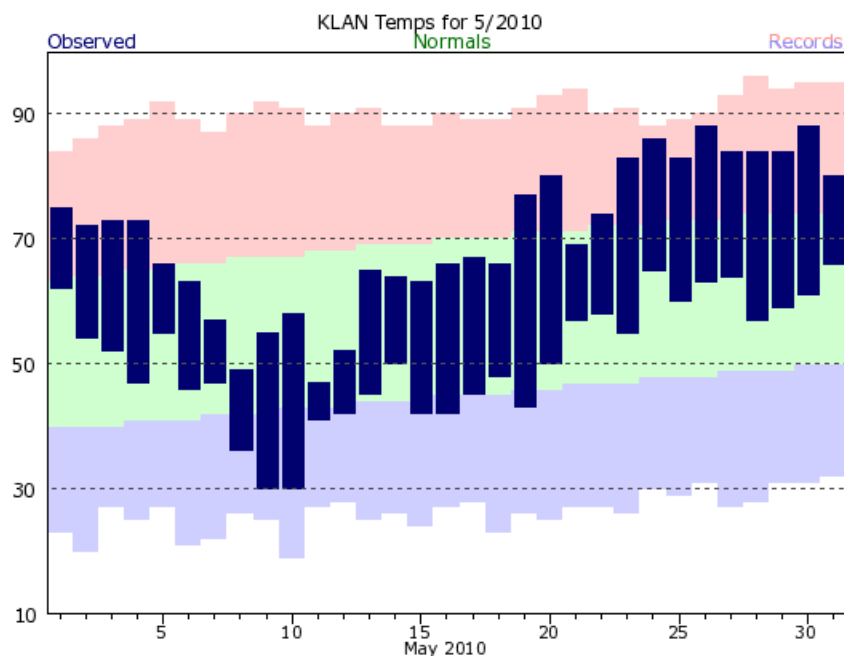


**Figure 1.** Average temperature departure from normal during May 2010.

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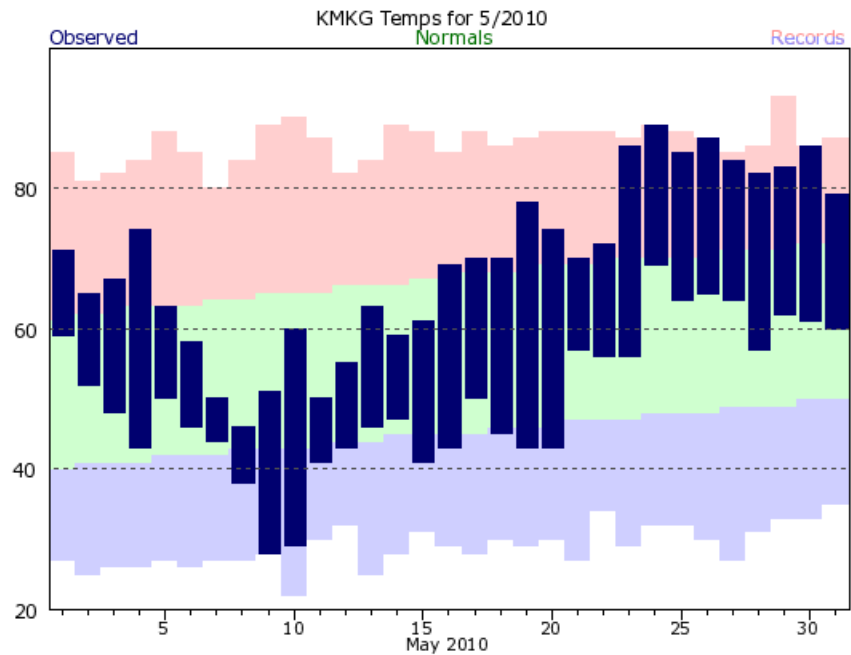


**Figure 2.** Observed temperatures at the G.R. Ford International Airport. Dark blue bars are the temperature range for each day. The central colored strip indicates the normal range of temperatures. Record high and low temperatures are indicated in the top colored strip and the bottom colored strip, respectively.



**Figure 3.** As in Figure 2, except for the Lansing/Capital City airport.

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**Figure 4.** As in Figure 3, except for the Muskegon County airport.

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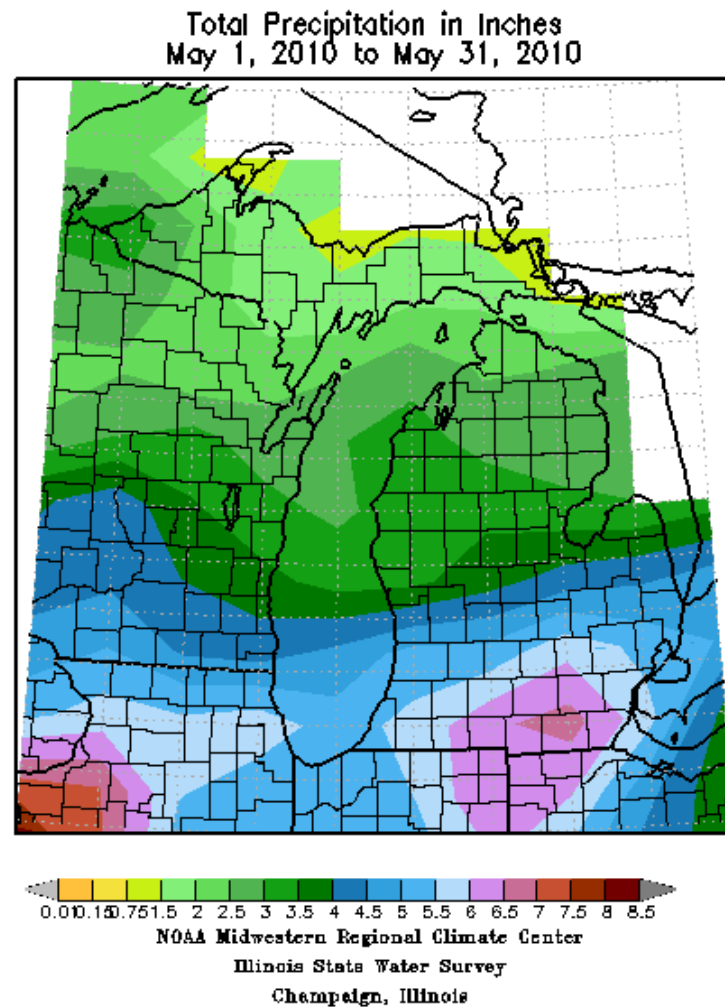
### **Precipitation Summary for May:**

While some thunderstorms were reported the first couple days of the month, some stronger thunderstorms produced dime size hail on the 7<sup>th</sup> along with gusty but non-severe winds. Temperatures were cold enough on the 8<sup>th</sup> to support the development of wet snowflakes across central and northern Lower Michigan. Steady rain was recorded during the morning of the 13<sup>th</sup>, and although severe weather was a possibility that day, none occurred. Dry weather dominated until the 21<sup>st</sup>, when thunderstorms moved across the area without any severe weather.

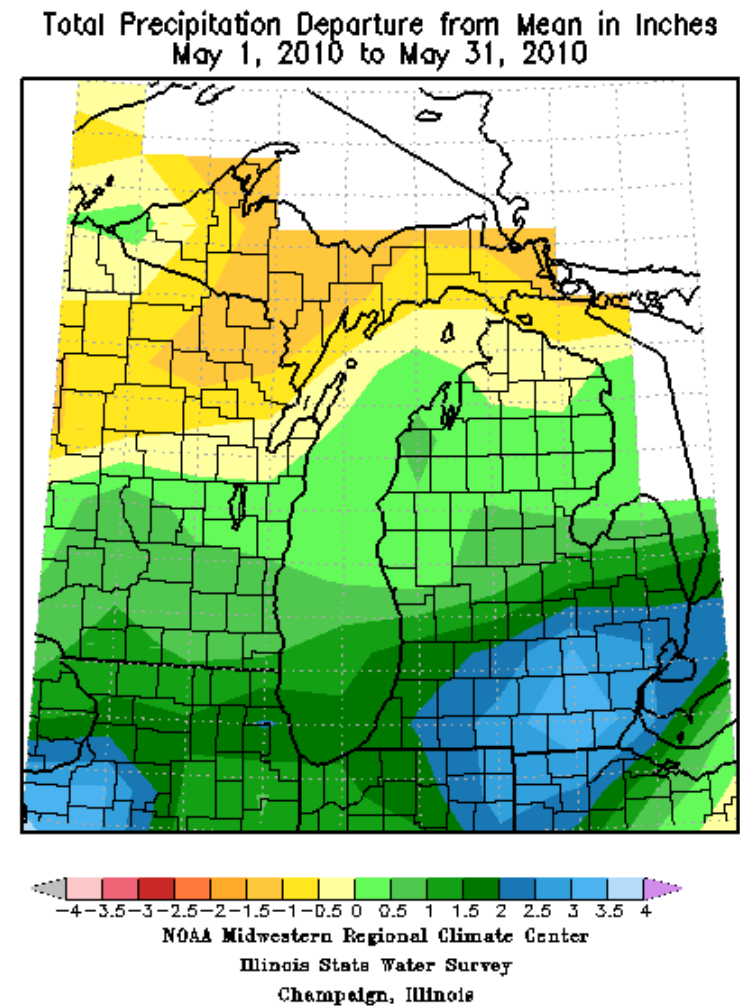
Locally heavy rain in association with very slow moving thunderstorms affected extreme northern Newaygo County and southeastern Lake County on the 26<sup>th</sup>. Even though nearly 3 to 6 inches of rain fell in this area, there was no reported flooding due to the rural nature of the area. On the same day, a thunderstorm dropped 1 to 2 inches of rain from downtown Grand Rapids toward the eastern suburbs, which was enough to create minor street flooding in the urban areas.

Rockford, Belmont, and other northern suburbs of Grand Rapids experienced flash flooding on the 31<sup>st</sup> as a nearly stationary thunderstorm produced a whopping 4 to 7 inches of rain across these locations. Yards started flooding and even portions of local roadways were washed out and had debris falling down the hillsides given the torrential rain. The Rogue River in Rockford rose dramatically during the height of this event, doubling its stage reading and exceeding flood stage in about 2 hours. Several homeowners along local streams and creeks dealt with significant flash flooding and property damage.

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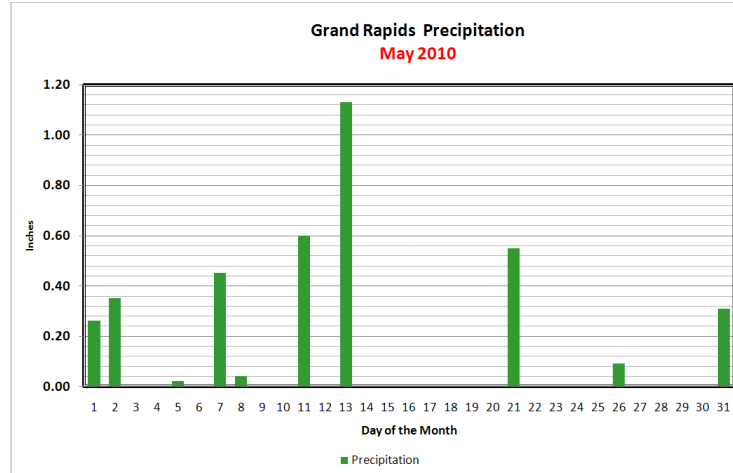


**Figure 5.**  
Total precipitation for May 2010.

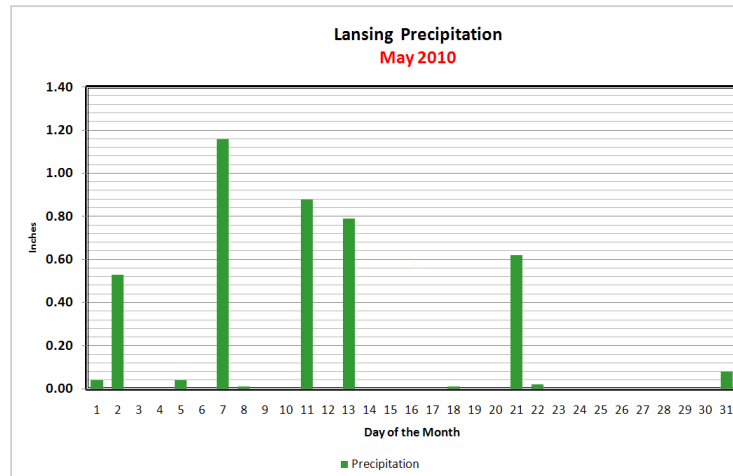


**Figure 6.**  
Precipitation departure from normal during May 2010.

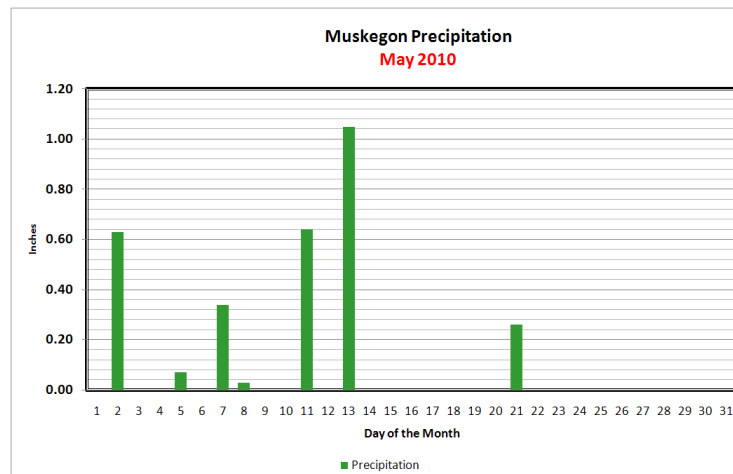
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**Figure 7.** Daily precipitation in inches for May 2010 at the Grand Rapids Gerald R. Ford International Airport.

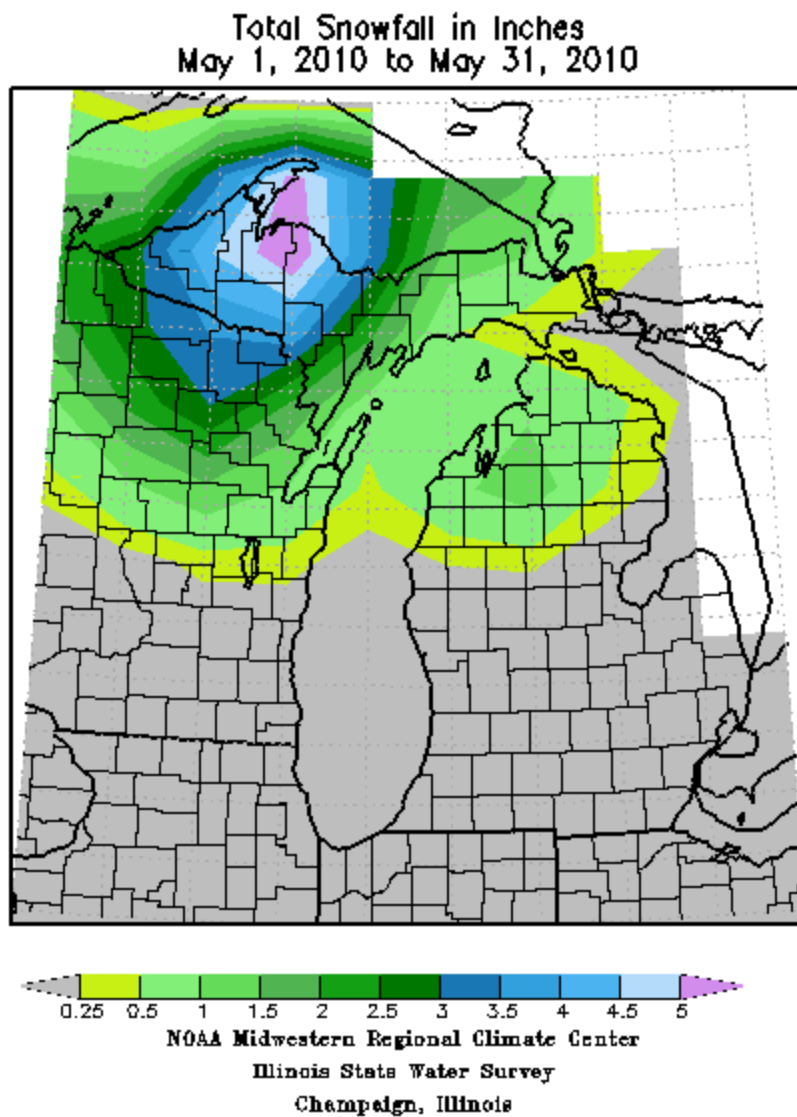


**Figure 8.** As in Figure 7, except for the Lansing Capital City Airport.



**Figure 9.** As in Figure 7, except for the Muskegon County Airport.

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**Figure 10.** The total snowfall for May 2010.

The trace amounts of snow across north central Lower Michigan were recorded on the 8<sup>th</sup> as the cold snap infiltrated the region.



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### Severe Weather Summary for May:

Although there were a few rounds of strong thunderstorms with small hail and gusty winds, severe weather was largely nonexistent this month. Perhaps the strongest storms came through right around daybreak on Memorial Day, when strong winds in the 50 to 60 mph range brought down some limbs, branches, and even a gardening tent in the Ottawa and Kent County areas. No reports of severe hail were received for the entire month. By far, flash flooding was the worst weather impact that residents had to deal with, mostly in Kent County.

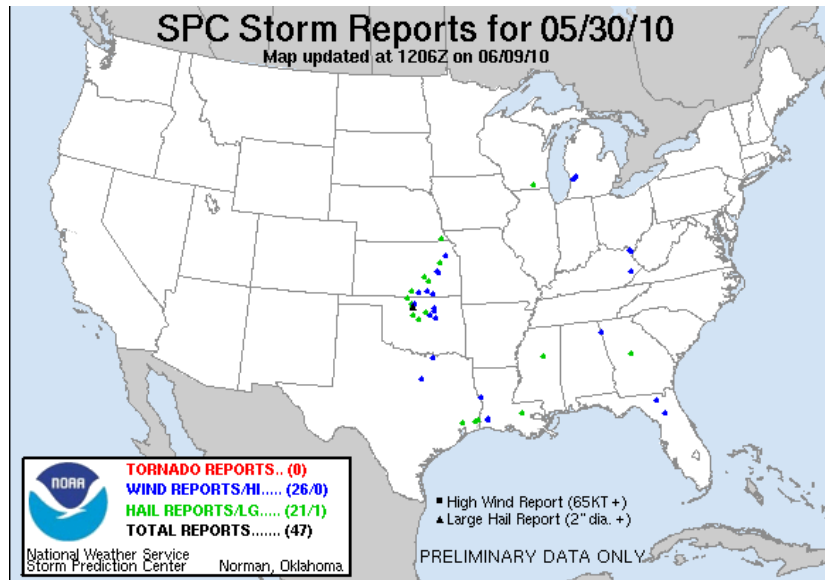


Figure 12. Severe weather reports from 8am May 30 – 8am May 31.

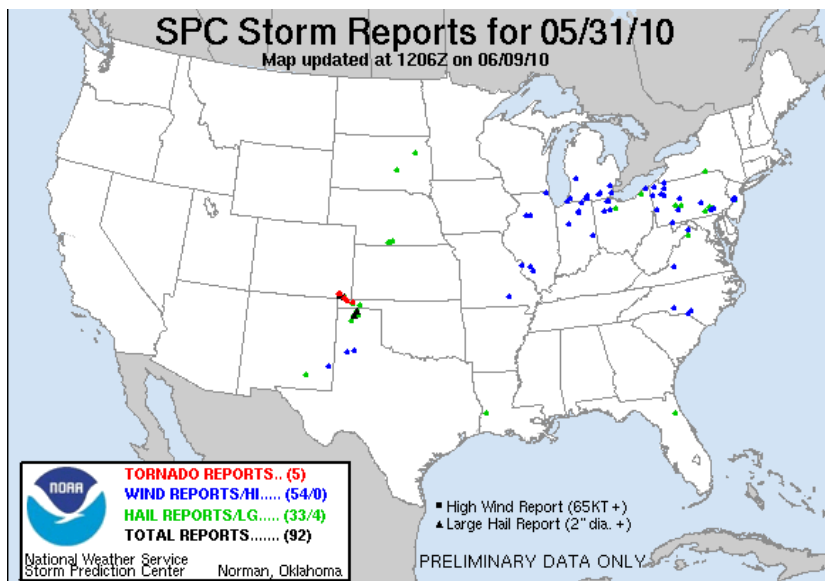


Figure 13. Severe weather reports from 8am May 31 – 8am June 1.